

WE CLAIM:

1. A folding table comprising:  
  
a pair of table tops folding between a use position and a storage position;  
  
a framework;  
  
a folding linkage connecting the table tops to the framework and folding the table between the use position and the storage position;  
  
a selectively releasable lock for the folding linkage automatically engaging at the storage position.
2. A folding table according to claim 1, wherein the selectively releasable lock automatically positions the table at a preferred storage position.
3. A folding table according to claim 1, wherein the lock comprises a handle and a latch rotatable mounted to a first one of the tabletops.
4. A folding table according to claim 1, wherein the lock comprises a latch rotatably mounted to a first one of the tabletops.
5. A folding table according to claim 4, wherein the lock comprises an engagement member mounted to a second one of the tabletops and engaging the latch at the storage position.
6. A folding table according to claim 4, wherein the table folds to an initial shipping position wherein the latch is freely rotatable relative to the handle.
7. A folding table according to claim 6, wherein the lock further comprises a pivot member having the handle mounted thereto and a sleeve having the latch mounted thereto, and wherein the pivot member and sleeve are concentric and released during shipping and connected for use.

8. A folding table according to claim 7, wherein the lock comprises a spring loaded detent connecting the pivot member and the sleeve.
9. A linkage for a folding table having first and second tabletops and folding between a use position and a storage position, comprising:
  - a first linkage assembly adapted to mount to an underside of the first tabletop;
  - a second linkage assembly adapted to mount to an underside of the second tabletop, wherein the first and second linkage assemblies engage and foldably connect the first and second tabletops;
  - a lock assembly adapted to mount to an underside of the first tabletop including at least one handle connected to a latching member, and an engagement member mounted to the second linkage and adapted to engage the latching member; wherein the handle selectively moves the latching member between an engaged position and a disengaged position, and wherein the latching member automatically engages the engagement member and locks the linkage upon folding the linkage to the storage position.
10. A linkage according to claim 7, wherein the handle and latching member are rotatably mounted.
11. A linkage according to claim 7, wherein the lock assembly comprises two handles.
12. A linkage according to claim 7, wherein linkage defines a folding axis and wherein the handles are mounted opposite one another axially outward from the linkage.
13. A linkage according to claim 7, wherein the latching member comprises a hook portion.
14. A linkage according to claim 7, wherein the latching member and handle automatically position the lock assembly and limit motion of the linkage assemblies.

15. A lock for a folding linkage comprising:
- a locking member mounted on a pivot on a first portion of the folding linkage;
  - a complementary member mounted on a second portion of the folding linkage; and
  - a handle mounted to the pivot, wherein the handle and the locking member engage the first portion of the folding linkage and limit pivoting range of the lock.
16. A lock for a folding table having folding tabletops and a folding linkage, comprising:
- a locking member mounted on a pivot on a first portion of the folding linkage;
  - a complementary member mounted on a second portion of the folding linkage;
  - a handle mounted to the pivot, wherein the handle and the locking member engage one of the tabletops and limit the pivoting range of the lock.
17. A method of locking a folding table having a folding linkage with a first assembly and a second assembly, a first tabletop and a second tabletop folding between a storage position wherein the first tabletop and the second tabletop are substantially opposed a use position, and a lock assembly having a locking member mounted to a pivot and a handle mounted to the pivot, and a complementary engagement member, the method comprising:
- rotating the handle;
  - folding the first and second tabletops to the ~~first~~ second position such that the locking member automatically engages and retains the engagement member and positions the first and second tabletops for storage.
18. A method according to claim 15, further comprising folding the table to a shipping position prior to folding the table to a storage position, comprising disengaging the handle and locking member from one another, moving the locking member to a non-engaging position, and moving the tabletops to a shipping position.

19. A method according to claim 16, further comprising engaging the handle and locking member, and moving the tabletops from the shipping position.

20. A folding table comprising:

first and second tabletops folding along a folding axis, wherein the tabletops define a generally oval table having a dimension transverse to the folding axis greater than a dimension along the folding axis;

a plurality of seating devices spaced evenly along a portion of the table periphery.

21. A folding table according to claim 18, wherein the spacing accommodates a cafeteria tray for each seat.

22. A folding table according to claim 18, wherein the seating devices define a space for accommodating a wheelchair.

23. A support structure for a folding table having tabletops folding between a use position and a storage position, comprising:

a plurality of mounting rails constructed for attachment to the tabletops;

a plurality of table legs pivotally attached to the mounting rails;

a storage lock assembly that locks the table support structure in the storage position when the mounting rails are brought into the storage position.

24. A folding table support structure according to claim 21, further comprising a use lock assembly that locks the support structure in the use position when the mounting rails are brought into the use position.

25. A folding table support structure according to claim 21, further comprising a plurality of support linkage members constructed to prevent the table legs from pivoting while the folding table support structure is in the use position, wherein a first support linkage member is attached to table legs of a first folding table assembly of a support structure and a second support linkage member is attached to table legs of a second folding table assembly of a support structure.
26. A folding table support structure according to claim 23, wherein the storage lock assembly includes a lock catch that is attached to the first support linkage member and a locking member that is pivotally attached to second foldable table assembly of a support structure.
27. A folding table support structure according to claim 21, wherein the tabletops comprising a generally oval table, wherein the first tabletop is attached to a first set of mounting rails and the second tabletop is attached to a second set of mounting rails.
28. A folding table support structure according to claim 21, wherein at least one table leg is constructed to support a least one seat.
29. A folding table support structure according to claim 25, further comprising a plurality of seats evenly spaced around the tabletop.
30. A folding table support structure according to claim 27, wherein at least one of the seats is removable to accommodate a wheel chair.
31. A folding table support structure according to claim 21, further comprising a torsion spring that applies torque between a mounting rail and a table leg in a direction that facilitates the folding of the support structure.
32. A folding table storage lock assembly comprising:  
  
a pivot attached to a first folding table assembly;

a lock catch attached to a second folding table assembly;

a locking member attached to the pivot, the locking member including a locking portion constructed to secure the locking member to the lock catch, an oblique portion constructed to slidably engage the lock catch and align the locking member with the lock catch; and

a handle attached to the pivot for unlocking the locking member from the lock catch.

33. A folding table storage lock assembly according to claim 30, further comprising a stop attached to the locking member constructed to engage a portion of the table support structure for limiting the pivoting range of the locking member.

34. A folding table storage lock assembly according to claim 30, wherein the pivot includes a crossbar that is positioned through a pair of aligned through holes defined in a set of mounting rails.

35. A folding table storage lock assembly according to claim 32, wherein the cross bar is housed within a sleeve that is positioned through a pair of aligned through holes defined in a set of mounting rails, wherein the sleeve pivotally engages the mounting rails, wherein a spring lock releasably attaches the crossbar to the sleeve.

36. A folding table storage lock assembly according to claim 30, wherein the handle is constructed to engage a portion of the table support structure for limiting the pivoting range of the locking member.

37. A method of locking a folding table in a storage position, the folding table having a lock device, comprising:

positioning a foldable table in a storage position, wherein the lock device automatically limits folding and positions the table at the storage position, and wherein the lock device automatically engages.

38. A method of unlocking a folding table from a storage position, the folding table having a support structure and a storage lock assembly with a handle mounted to a locking member attached to a first portion of the folding table, the locking member selectively engaging a lock catch on a second portion of the folding table support structure, comprising: pivoting the handle, thereby pivoting the locking member and disengaging the catch to release the folding support structure.